

REMARKS

In the Office Action dated June 11, 2009, and marked final, the Examiner rejects claims 1, 3-6, 8, 10 and 11 under 35 U.S.C. § 102(b) as being anticipated by Munshi. The Examiner rejects claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Munshi as applied to the claims and further in view of Hwang et al., claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Munshi in view of Usui et al., and claims 12-20 under 35 U.S.C. § 103(a) as being unpatentable over Munshi in view of Hopkins et al. Claim 21 is also rejected under 35 U.S.C. § 103(a) as being unpatentable over Munshi as applied to the claims. With this Amendment, claims 1, 10 and 12 are amended, and claim 4 is canceled. Claim 2 was canceled in a previous response. After entry of this Amendment, claims 1, 3 and 5-21 are pending in the Application.

Applicants take notice of the double patenting rejections and wish to address this when allowable claims have been determined.

Rejections under 35 U.S.C. §102(b)

Claims 1, 3-6, 8, 10 and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Munshi. Independent claims 1 and 10 (and by their dependency claims 3, 5, 6, 8 and 11) have been amended to include the limitation that the electrolyte is a liquid, as supported in paragraph [0044] of the specification. Claim 1 has also been amended to incorporate the limitations of dependent claim 4, which has been canceled. Claims 1 and 10 as amended recite a bipolar electrode stack comprising a collector, a cathode electrically connected to a first side of the collector, an anode electrically connected to a second side of the collector, and one or more layers of liquid electrolyte overlaying the cathode and anode, wherein the collector comprises a high-polymer material of one or more of polyethylene terephthalate, polyimide, and polyamide containing a plurality of electrically conductive particles. The cathode and anode directly contact at least a portion of the high-polymer material of the collector.

The Examiner contends that Munshi teaches or suggests each and every element of Applicants' claims 1 and 10. However, Munshi does not teach a collector comprised of a

high-polymer material of one or more of polyethylene terephthalate, polyimide, and polyamide. As the Examiner has accurately listed on page 2 of the Office Action, Munshi discloses the use of a collector formed of PET(polyester), PP, PEN, PE, PVDF, PC, PPS and PTFE only.

Munshi also does not disclose one or more layers of liquid electrolyte. Munshi discloses lithium solid polymer electrolytes. (Col. 7, ll. 44-45).

Because Munshi fails to teach a collector comprising the high-polymer material recited in claims 1 and 10 as well as a liquid electrolyte as recited by Applicants in independent claims 1 and 10, Munshi does not teach, suggest or anticipate claims 1 and 10. Applicants respectfully submit that claims 1 and 10, as well as claims 3, 5, 6, 8 and 11 by their dependencies therefrom, are in condition for allowance.

Rejections under 35 U.S.C. §103(a)

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Munshi as applied to claims 1-6, 8, 10 and 11 and further in view of Hwang et al. Claim 7 depends from claim 1 to include all of the limitations therein. As argued above, Munshi fails to teach or suggest each and every limitation of claim 1. Therefore, the combination of Munshi and Hwang et al. would need to cure the deficiencies of Munshi. Hwang et al. fails to teach or suggest the same elements Munshi fails to teach or suggest -- a collector comprising the high-polymer material recited in claims 1 and 10, as well as a liquid electrolyte. Therefore, Hwang et al. does not cure the deficiencies of this combination. Therefore, at least by its dependency from claim 1, the invention of claim 7 is not rendered obvious by the cited combination.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Munshi in view of Usui et al. Claim 9 depends from claim 1 to include all of the limitations therein. As discussed above, Munshi does not teach or suggest a collector comprising the high-polymer material recited in claim 1 as well as a liquid electrolyte. Usui et al. in combination with Munshi would not render obvious to one skilled in the art to utilize the high-polymer materials listed without a metal layer. Because Usui et al. in combination with Munshi does not teach, suggest or

render obvious claim 1, the combination also does not teach, suggest or render obvious claim 9 due to this dependency.

Claim 21 is also rejected under 35 U.S.C. § 103(a) as being unpatentable over Munshi as applied to the claims. Claim 21 depends from claim 11 to include all of the limitations therein. As argued above, Munshi does not teach or suggest a collector comprising the high-polymer material recited in claim 1 as well as a liquid electrolyte. Therefore, Munshi does not render obvious those elements in claim 21.

Claims 12-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Munshi in view of Hopkins et al. Amended independent claim 12 (and claims 13-20 by their dependency) recites a method for manufacturing a bipolar electrode assembly comprising forming a collector by applying a high-polymer material comprising one or more of polyethylene terephthalate, polyimide, and polyamide and containing a plurality of electrically conductive particles in a desired form using an inkjet printing method; applying a cathode material layer to a first side of the high-polymer material of the collector; applying an anode material layer to a second side of the high-polymer material of the collector; applying a first layer of liquid electrolyte overlaying the cathode material layer; and applying a second layer of liquid electrolyte overlaying the anode material layer. The amendment to the first step of claim 12 clarifies and conforms the step to the specification as described in paragraphs [0051], [0052] and [0063].

As discussed above, Munshi does not teach or suggest a collector comprising the high-polymer material recited in claim 12 and does not teach or suggest a liquid electrolyte. Hopkins et al. does not teach or suggest using an inkjet printing method to form a collector. Hopkins et al. only discloses using an inkjet printer for forming electrodes on a collection. In addition, combining Hopkins et al. with Munshi does not teach, suggest or render obvious a collector comprising the high-polymer material recited in claim 12 as well as a liquid electrolyte, both deficient in Munshi. Therefore, the invention of claim 12 and its dependent claims is not rendered obvious by the cited combination.

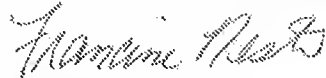
Conclusion

Applicants respectfully submit that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the application. Reconsideration of the application as amended is requested. It is respectfully submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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